

12/5/1990

CHEMICAL PROCESSORS, INC.
PIER 91

RCRA INSPECTION REPORT

Inspection Conducted
12-5-90

FILE COPY

FACILITY ADDRESS:

Chemical Processors, Inc.
2203 Airport Way S. Suite 400
Seattle, WA 98134

SITE ADDRESS:

Chemical Processors, Inc.
2001 W. Garfield
Seattle, WA 98119

TELEPHONE NO.

TELEPHONE NO.

(206) 284-2550

RCRA No.WAD009812917

1.0 INTRODUCTION:

On the 5th of December, 1990, an EPA, Region 10 Resource Conservation and Recovery Act (RCRA), Compliance Evaluation Inspection (CEI) was conducted at the offsite listed Chemical Processors, Inc. facility located at Pier 91, 2001 W. Garfield, Seattle, WA. 98119. A facility must be in compliance with all applicable RCRA regulations before the facility is allowed to handle EPA generated CERCLA wastes. The purpose of the inspection was to determine the facility's compliance with those regulations set forth in 40 CFR Parts 260-270 and Washington State Department of Ecology Dangerous Waste Regulations, WAC 173-303.

2.0 SITE CONTACTS:

Nathan E. Mathews, Plant Manager, (206) 284-2450
Ron Atwood, Division Manager, (206) 223-0500
Trudy A. Harding, Compliance Specialist, (206) 223-0500

3.0 DATE AND TIME OF INSPECTION:

12-5-90 @ 0930 hours

4.0 NAME AND TITLE OF INSPECTOR/S:

W. Douglas Smith, Senior Compliance Investigator, (206) 553-7176

5.0 NATURE AND HISTORY OF BUSINESS:

Chemical Processors, Inc., Pier 91 is a transporter, generator, storer and marketer of waste fuel .



The ChemPro facility is located at a former U.S. Naval site on the northern waterfront of Elliot Bay. The site is owned by the Port of Seattle and leased to Chemical Processors, Inc. from 1971 to the present. The main offices of Chemical Processors, Inc. are located at Park 90/5, Suite 400, 2203 Airport Way South, Seattle, WA 98134. Chemical Processors, Inc. Pier 91 has bulk storage capacity of 9,000,000 to 11,000,000 gallons (depending upon tank conditions) and subleases about 70% of the property and storage to Pacific Northern Oil Co. (PNOCO). Ron Atwood, Division Manager for the corporation stated that the main function of the ChemPro Pier 91 facility was waste oil reclamation and not hazardous waste treatment and storage. The treated and reclaimed waste oil is sold to PNOCO to be used as cutting stock in marine fuels. ChemPro Pier 91 notified EPA of its waste oil marketing activities on January 27, 1986. The most recent notification of activities was reported by Ron Atwood to have been submitted 2-27-90 (See attached "Generator and TSD Annual Dangerous Waste Reports-1989).

6.0 PERMIT AND ENFORCEMENT HISTORY:

The facility has an NPDES permit with Seattle (METRO). ChemPro Pier 91 self monitors and is inspected at regular intervals by METRO. Mr. Mathews stated that there have been no violations of their discharge permit within the last year. A release was discovered in an EPA/State records review on August 31, 1989. That review resulted in a Notice of Noncompliance.

The last Compliance Evaluation Inspection took place on May 31, 1990. No violations were discovered at that time.

7.0 TYPE OF INSPECTION:

This was a Compliance Evaluation Inspection (CEI) conducted under § 3007 of the Solid Waste Disposal Act (SWDA). It was performed without prior notice to the facility.

8.0 OPENING CONFERENCE AND CREDENTIALS:

Credentials were shown upon entry to Nathan E. Mathews, Plant Manager of the Pier 91 facility; Trudy Harding, Compliance Specialist for Chemical Processors Inc.; and Ron Atwood, Division Manager for Chemical Processors Inc.

I outlined the types of records I would need to review in the inspection. Mr. Atwood and Ms. Harding took notes. I gave the facility a copy of a typical RCRA inspection check list which they copied and then filled out in unison with me as we proceeded with the inspection. Once we began the inspection they did not have access to my inspection check list though we freely discussed my observations as I made entries.

There are 10 to 12 employees working two shifts a day.

I asked Mr. Mathews who were the suppliers of waste oils received by the facility. He said that there were three. They were United Drain Oil (A ChemPro subsidiary), Resource Recovery (A ChemPro subsidiary), and Vintage Oil which operates a bulk oil tank farm in Anacortis. ChemPro Pier 91 then treats and markets the oil received from these waste oil collectors. The ChemPro Pier 91 facility has three processes for treating waste oils. 1) They deemulsify with a process from Emulsions Control out of California. 2) They use a thermal treatment which stratifies oil containing materials by weight and density. 3) They also use a salting process using various proprietary combinations of Silicate, and Chlorine compounds. Mr. Mathews stated that the common oils received at the Pier 91 facility fell into three categories. These categories were Tramp Oils which were high in bottom sediments. They were treated in tank # 112. Machine Coolant oils were treated in tank # 110. Common waste oils and oily waters are also received by the Pier 91 facility.

We then entered into a dialogue on the waste oil business in general. Mr. Mathews stated that there were a number of collectors which collected regulated materials (e.g. halogenated compounds) and disposed of them illegally. I asked how common it was for halogenated compounds greater than 1000 ppm to enter waste oils. Mr. Mathews stated that it was a common problem. He stated that it was common to blend bulk oils which exceed 1000 ppm total halogens with oil of lesser concentrations in order to be able to sell it. I asked him if he knew if any of that blended oil came to Pier 91. He said that none of his regular collectors (those listed above) blended, but he knew that it was fairly common in the industry. He then cited the types of testing that Pier 91 performed on each load received. In addition to regular viscosity, solids, flammability, and water content tests, all waste oils received are tested for total halogens and PCBs specifically. PCBs are analyzed by using a Doorman (phonetic spelling) analyzer which gives quantitative measurements of PCB content.

All oils which have completed processing are then sold to Pacific Northern Oil Co.(PNOCO), which shares the property and subleases tank storage from ChemPro Pier 91. I asked Mr. Mathews if there were lines which connected bulk storage at ChemPro Pier 91 with PNOCO. He said that there were none. I asked if there were connections from the old truck landing facility which could also be used to deliver directly to the PNOCO bulk storage. He said that all lines at the landing lead to ChemPro Pier 91. I requested a pipe diagram of the facility which showed all lines used to fill all tanks owned by ChemPro Pier 91. I further explained that I needed this diagram in order to identify pipes used by ChemPro or those used by PNOCO. Mr. Mathews stated that he was not sure that he had a current diagram of the piping but Mr. Atwood said that Pier 91 needed one anyway and noted my request.

Mr. Mathews stated that PNOCO was a blender broker who purchases residual bunker and diesel from refineries and blends it to make specification oil. Mr. Mathews continued that PNOCO also uses waste oils for marine boiler fuels and specification oil blending. Mr. Mathews stated that there are no present corporate ties between ChemPro Pier 91 or ChemPro Corporate and PNOCO. Mr. Atwood stated that there were original relationships when Ron West was President of Chemical Processors Inc. Ron West and his brother (a "Mr. Craig") were on the board of directors for PNOCO. I asked if Mr. Fisher was the current President of Chemical Processors Inc. Mr. Atwood stated that Mr. Fisher recently left and a Dr. John Craig from El Paso, Texas, was the current President. Mr. Craig (Ron West's brother) had corporate affiliations with David Sabey (47% ownership) and Burlington Environmental (53% ownership) who are the present owners of Chemical Processors Inc. Mr. Atwood said that he did not know if Dr. Craig was related to the "Mr. Craig" known to be the brother of Ron West, former president of ChemPro.

I asked Mr. Mathews what the approximate annual through put was for the Pier 91 facility. He opened his file behind his desk and produced records indicating the following:

1986 = 4.1 million gallons
1987 = 2.8 million gallons
1988 = 1.9 million gallons
1989 = 3.9 million gallons
1990 = to December 1990 has been 2.5 million gallons.

9.0 RECORDS:

The majority of the records required under RCRA are part of the existing Part B application submitted to EPA by ChemPro Pier 91. I asked if there had been any modifications of their operation since their last notification. Mr. Mathews said that there were not. He continued by saying that there was a plan to reduce bulk storage to approximately 500,000 gallons by leasing most of the remainder of their bulk storage to PNOCO, but that would not take place until all the tanks had been cleaned and inspected. I asked how old the tanks were. He said that they were all over fifty years old and some were over sixty.

9.1 ANNUAL REPORTS;

I requested and was given a copy of the 1989 TSD and Generator Annual Reports (Attached). In addition I requested and was given a copy of the facility's most recent Waste Minimization report. The report was dated February 27, 1990 (Attached).

The TSD Annual Report stated that in 1989 there were Phenolic waters and Hydrogen peroxide received at the facility. At 1410 hours on December 18, 1990 I telephoned Mr. Mathews and asked him to explain the presence of those chemicals. Mr. Mathews stated that Phenolic water treatment is a common process at ChemPro Pier 91. He said that it is treated by lowering the pH to about 3.5. Once the Phenols had been destroyed they raised the pH by adding Hydrogen peroxide. I asked Mr. Mathews what kind of waste products resulted from the treatment. He stated that they were primarily sediments. In the Part A dated February 18, 1986, 22 hazardous waste treatment operations were identified by ChemPro Pier 91. I requested documentation on each of their current treatment processes and waste streams in writing on December 17, 1990 (See attached copy). That request also identified the need for identification on the contents of each of the tanks under the control of ChemPro Pier 91.

There were 22 waste treatment operations reported in the February 18, 1986, Part A notification. From the inventory of chemicals stored in the ware house it appeared that more than Phenol waters were being treated at the Pier 91 facility. How they were treated and their hazard classification has never been clearly identified through sampling by the State or EPA.

9.2 CONTINGENCY PLAN;

The contingency plan was essentially the same as that given in the Part B application, Section G, dated September 1988. This plan was cross checked with curriculum materials presented in employee training records.

There had been a recent fatality accident on the ChemPro property. A boiler belonging to PNOCO exploded during maintenance killing the repair man. Mr. Mathews explained the response procedure through the entire emergency and explained how each phase of the contingency plan was implemented. Mr. Mathews provided documentation substantiating these actions (See attached accident report by Mr. Mathews). In addition to the documentation provided by Mr. Mathews, I requested a copy of the police and fire report report (See attached copy of my Dec. 17th letter.).

9.3 WASTE ANALYSIS PLAN;

The existing waste analysis plan was discussed and found to be essentially the same as described in the September 1988 Part B application. (See attached RCRA inspection check list.) The only deviation from the plan observed was the week before this inspection. During a drive by where I was accompanied by Robert Athmann and Dennis Sivak we observed a tanker truck pull directly up to the terminal and begin pumping his tanker. A sample was taken from the tanker and transported to the adjacent lab. That indicated to me that oils from the tanker were commingled with the bulk materials in storage before analysis took place. I brought this up in the opening conference with Mr. Atwood. He said that it was routine for their drivers to conduct a Chlor-d-tect sample analysis before they pick waste oil up. The analysis at the Pier 91 lab is a redundant sample.

9.4 WASTE ANALYSIS;

Routine oil analyses are performed on site in one of two small laboratories. The one closest to the administration offices (See diagram attached) is primarily used for total halogen, viscosity, and total solids analysis. Routine process analyses are run in the other

lab. Chemical analyses are run at the ChemPro, Georgetown laboratory on Airport Way, Seattle.

9.5 UNIFORM HAZARDOUS WASTE MANIFESTS;

Several uniform hazardous waste manifests were selected and reviewed. No potential violations were observed in those documents reviewed. A sample copy of one of the manifests was taken and is attached. (See manifest document no. AO280)

9.6 TRAINING PLAN;

The training plan was discussed in detail. The contingency plan had been recently activated because of a fatality accident. The curriculum for the training appeared to adhere to the contingency plan outlined in the September, 1988 part B application. An employee's name was chosen at random (Marly Halloway) and his training file was reviewed. All documentation appeared complete and up to date.

9.7 INSPECTION LOGS;

It was not possible to determine if the inspection logs were complete because a complete diagram of the facility's piping to the tankage was not available. I requested a complete description of all piping, tankage, processes, and storage within 10 working days of this visit (Dec. 5, 1990).

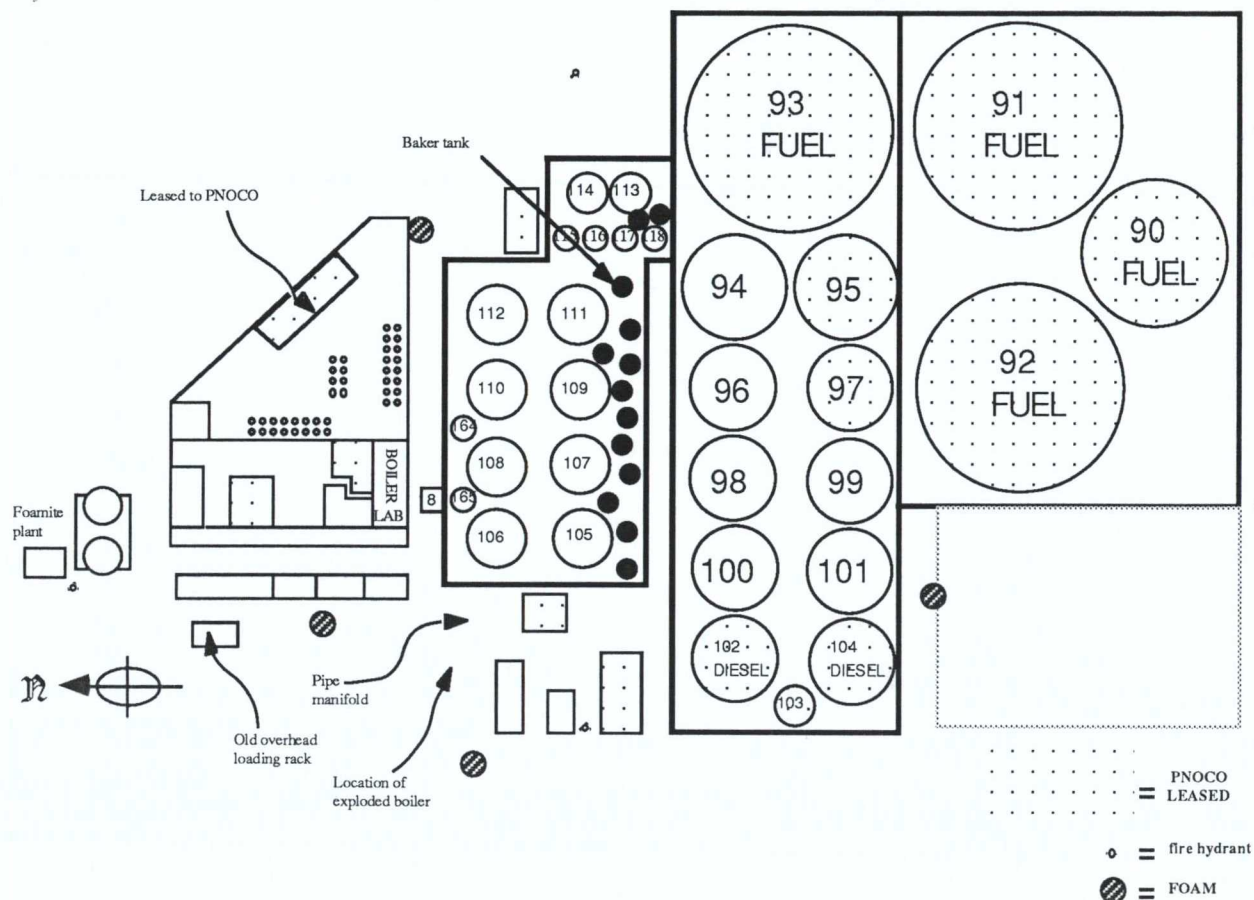
There were detailed inspection logs which had the time, location, type of problem, and inspector signature but there were no notations regarding the type or time of the remediation of the problems observed during the inspection. There were separate work orders called "Maintenance Request Forms" which identified the type of work which needed to be performed. (A sample # 91 is attached.) These forms had a space for "corrective action already taken" but no information about if, how, and when the remediation actually took place. There were no cross references to the original inspection log entry. This appeared to be a violation of the inspection requirements for TSD's.

9.8 CLOSURE PLAN;

The "interim status closure plan" was reviewed and a copy taken. The dates of its last revision were August 31, 1989 to remove credits for resale of products/recycled materials and to correct grammar and math errors; and August 31, 1990 to adjust the 1989 annual inflation factor (4%) and to revise the specific waste stream/disposal costs shown in table 6.

10.0 FIELD INVESTIGATION:

I toured the facility with Mr. Mathews, Mr. Atwood, and Ms. Harding. Beginning in the Administrative offices we moved in a counterclockwise direction around the plant (See diagram of the facility).



The manifold area for waste oil distribution to the tanks was to the west of the office area. That area also was the site of the boiler explosion. In the week between this inspection and the explosion, the entire area had been rebuilt and new piping had not yet been placed. I was told by Mr. Mathews (first to respond to the explosion), that the boiler traveled in excess of 400 yards to the north. The worker repairing the boiler was killed instantly. Mr. Mathews said it was 100 yards before the workers leg was found and the major portion of his torso was several hundred yards further. More than 40 automobiles were damaged by the boiler. If the boiler had traveled south it would have entered the tank farm with the probable result of ruptured tanks and fire. Mr. Mathews thought that the cause of the explosion was a breach between the fire wall and the water jacket (See photos 1 and 2 of the boiler). The boiler was stored about 100 yards south east of the facility. I inspected the boiler and looked inside the burn chamber and at the exterior and interior chambers. I saw no evidence of a breach in the inner combustion chamber which could have resulted in a force capable of sending the several ton boiler more than 400 yards. I had investigated a similar explosion at an asphalt plant where contaminated fuels had built up "light end" petroleum vapors of much lower flammability temperatures. These vapors ignited and blew the top off a tar heating stack. I asked Mr. Mathews to provide a Seattle Fire Department report in order to gain a further understanding of the cause of the explosion and resulting fatality. Some facilities I have inspected have used light end fuels for heat recovery. I also requested a facility piping diagram

There were foam distribution units through out the facility. Fire and water supply equipment appeared to be well maintained and ready for use.

The plant was generally organized and uncluttered.

There were warning and no smoking signs placed in clear view around the facility..

Communication throughout the plant is via radio, line of site and voice communication. There is

an emergency horn planned for the Part B qualification but it was not in place at the time of this inspection. It appeared to me that communication would not be acceptable in an emergency because of the many high berming walls and many convolutions in the structure of the complex. There are procedures to carry walkie talkies into these areas but there is no back up system if there were battery or mechanical failure.

Product storage for materials used in the various treatment processes was orderly, segregated, and properly marked. Drums were stored on an impermeable base with a fire wall behind them (See photo #8).

I visited a store room with a "no smoking" sign on its door (Photo #14). The store room had sample containers with a total volume of contents equivalent to about 3 55-gallon drums. The store room belonged to ChemPro Pier 91 and contained ChemPro materials, Mr. Mathews said. I asked if the samples had been run for analysis. Mr. Mathews said that he thought they had. I observed that one of the sample bottles said Chemical Processors and Exxon Valdez, 1989 on its label. About 1/4 to 1/3 of the sample containers did not appear to have labels at all. The box it was in was on top of other boxes of sample bottles leading me to believe that it had been deposited there the most recently and the sample containers in the boxes below it were even older. It was impossible to look at the lower boxes without the chance of spilling samples. Many of the sample containers were broken, leaking, or open (See photos 11,12,and 13). There was spilled material on the floor of the storage room (See photo # 12). Other material stored in the room included used paint cans, thinner cans, and debris (See photos # 9, and 10). There was a strong odor of solvents in the room and I quickly left for personal safety

Another sample storage area was discovered in a companion way behind the laboratory's eastern wall (See photos # 16, and 17). These samples I could observe were all dated 1990 and did not appear to be as old as those in the first storage area though I could not see many of the labels without moving boxes or cleaning oily residue from the labels. The volume of sample material was about 2-55 gallon drums. Many were leaking and boxes on the bottom and the floor were saturated with an oily material.

We observed a typical analysis operation on a waste oil delivery in the small lab.

The entire tank farm area was visited. It appeared orderly and no significant leaking was observed.

The Longbeach tank sediment operation was located on the eastern perimeter of the tank farm. It utilized the 16,000 gallon baker tanks (See diagram of facility) to remove sediments from the in place steel tanks (See photographs 6 and 7).

11.0 CLOSING CONFERENCE:

The closing conference was held in Mr. Mathew's office. At that time I repeated my request for further documentation and asked if there were any questions or information they had to add regarding any part of the inspection. I asked if there was any more information about the samples in the store room. Mr. Mathews said that he didn't even know that they had been placed there. I asked if all the samples were oily wastes. Mr. Mathews said that he didn't know that they were and that it would be hard to tell because many of the containers did not have labels.

12.0 SAMPLING:

No samples were taken.

13.0 VIOLATION CONCERNS:

Communication in an emergency did not appear adequate because of the lack of backup and the difficulty with high walls and voice or "line of site" communication methods. ChemPro has

recognized this and plans the instillation of a PA system. (Reference 40 CFR §264.34 (a) & (b). It should be noted that there are protocols in place for two man teams when treatment is in progress, and walkie talkies are available if individuals are likely to have to work alone.

A large volume of unknown sample material was discovered in two locations. The material was leaking and stored with flammable materials. (Reference 40 CFR §264.171 and 40 CFR §264.173). The sample containers had a total volume of about two or three 55 gallon drums in liquids and/or solids. Many sample containers were open, or had been broken with their contents leaking onto the floor (See photos). The samples were reported by Mr. Mathews to be either samples which had not been analyzed or samples which had been analyzed and simply discarded in the store room and forgotten for more than a year. In either case the open containers were not being added to and there was the possibility (admission to me by Mr. Mathews) that at least some of the sample containers contained untreated hazardous waste.

14.0 SAFETY:

There was climbing involved in this inspection. Head protection should be worn when outside the offices. Oily and slippery surfaces exist everywhere.

15.0 ATTACHMENTS:

- A. RCRA inspection check lists
- B. Notebook
- C. Photographs (slides 1-17) and Photo log
- D. Closure documents
- E. Maintenance Request form
- F. Manifest A0280
- G. Site diagrams
- H. Annual Reports
- I. Accident Report by Mr. Mathews
- J. Copy of my Dec. 17th, 1990 letter, requesting more documentation.

2/5/91
DATE


W. Douglas Smith, Sr. Compliance Investigator